

## SYNCHRONIZING RF SYSTEM

### ABSTRACT OF THE DISCLOSURE

A synchronizing method and system between a Radio Frequency (RF) transmitter and a battery powered receiver wherein the transmitter transmits short duration first periodic sync signals which are used by the receiver to maintain proper synchronization of the receiver with the transmitter during second periodic wake-up windows for transmission of data. The receiver wakes for a short duration at the start of each periodic wake up window to receive a possible transmission of data, and if no transmission is received goes back to sleep, and if a transmission is received stays awake to receive the full transmission of data. The basic principle is that the average current consumed by the battery powered receiver in order to wake periodically to receive the first periodic sync signals and the second periodic data transmissions is less than the average current required to maintain the receiver awake continuously. The duration (e.g. 14ms) and periodicity of (e.g. every 32s) of the periodic signals are selected to meet a FCC regulation of 2 second/hour allowed for synchronization.